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ABSTRACT

The Early Warning System (EWS) of the Individualized Study Program (ISP) at the University of California, Davis, was evaluated. Disadvantaged students who have not met the university's entrance requirements are tracked by the EWS during their first year in order to identify academic problems and provide advising and support. Findings include: EWS was successful in tracking and identifying specially-admitted low income and minority students who earned unsatisfactory grades during their first year; half of these students who earned unsatisfactory grades came to the Learning Skills Center of the university for an interview in 1982-1983, but one-quarter declined an interview, and about one-quarter could not be reached; most of the units of academic advice provided during the interviews were followed and most of these units had successful outcomes; all students for whom the ISP was recommended during the interview participated in ISP workshops and development activities; a quarter-by-quarter analysis of academic performance revealed no differences in improvement in grade point averages for EWS participants and nonparticipants; and the fourth quarter retention rates of EWS interviewed students were 15-20 percent higher than those of EWS students who were not interviewed. (SW)

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EVALUATION OF THE INDIVIDUALIZED STUDY PROGRAM EARLY WARNING SYSTEM

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September 1984

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EVALUATION OF THE INDIVIDUALIZED STUDY PROGRAM EARLY WARNING SYSTEM

Executive Summary

The Early Warning System (EWS) is a tracking and academic advising system operated by the Learning Skills Center at UC Davis. Developed as part of the Individualized Study Program (ISP), the EWS tracks special action EOP students during fall and winter quarter of their first year in order to identify those in academic trouble and to offer them advising and follow-up support services. This report examines the extent to which the EWS is successful in identifying and delivering service to its target population and the extent to which it has resulted in higher retention rates for these high-risk students.

The major findings of this evaluation are:

- The EWS is successful in tracking and identifying special action EOP students who earn unsatisfactory grades (below C-, NP or U) during fall or winter quarter of their first year at UC Davis.
- In 1982-83 half of the special action EOP students identified as having unsatisfactory grades came into the Learning Skills Center for an interview, one quarter declined an interview and about one quarter could not be reached.
- Despite variations among time periods, the overall trend is that most of the units of academic advice provided during the interviews were followed and that, where measurable, most of these units had successful outcomes.
- All students for whom the Individualized Study Program was recommended during the interview participated in ISP workshops and development activities.
- A quarter-by-quarter analysis of academic performance revealed no differences in improvement in GPAs based on whether students chose to participate in the EWS, declined to participate, or could not be reached.
- The fourth quarter retention rates of EWS interviewed students were 15 to 20% higher than those of EWS students who were not interviewed.

Caution should be used in interpreting the results of comparison analyses based on EWS intervention status. Due to unavoidable limitations in the study design, it is not possible to conclude with certainty that differences in retention rates between EWS interviewed and EWS non-interviewed students are a result of the EWS intervention. However, evidence that the program was implemented as proposed and that most units of academic advice resulted in successful outcomes indicates the EWS is making an important intermediate step toward improving the retention rates of service recipients.

EVALUATION OF THE INDIVIDUALIZED STUDY PROGRAM
EARLY WARNING SYSTEM

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EVALUATION OF THE INDIVIDUALIZED STUDY PROGRAM EARLY WARNING SYSTEM

INTRODUCTION

The Learning Skills Center at UC Davis provides a network of academic support services designed to improve the academic performance and retention of EOP special action students. These services are first offered to students the summer prior to their enrollment at UC Davis in the form of the Special Transitional Enrichment Program (STEP). Partially because previous evaluations of campus enrichment programs[1] indicated that remediation could not be accomplished in a summer alone, STEP support services were extended through the first academic year. One of these academic year extensions of STEP is a reduced study load program called the Individualized Study Program (ISP). The ISP enables special action EOP students to take fewer than 12 units for one or two quarters, substitute intensive basic skills development activities, and still maintain full-time student status for purposes of financial aid. For winter and spring quarters, eligible students are directed into this reduced study load program through a tracking and academic advising component known as the Early Warning System (EWS). The EWS operates between fall and winter quarter, and between winter and spring quarter of a student's first year at UC Davis. It was designed to accomplish the following objectives:

1) to identify students within the special action EOP target population who received at least one unsatisfactory grade (below C-, NP or U) during fall or winter quarter;
2) to intervene as soon as possible after completion of the unsuccessful course by providing academic advice and follow-up support services tailored to each individual's academic problem; and
3) to provide an efficient process to identify candidates for the Individualized Study Program.

By meeting these three short-term process objectives, the EWS proposes to contribute toward the long-term primary objective of reducing the attrition rate of special action EOP students. The findings of the Report of the UC Davis Task Force on Retention and Transfer (June 1980) indicate that, in general, special action freshman entrants graduate at one-third the rate of their regularly admitted peers. In addition, they are five times more likely to leave in academic difficulty. This connection between academic difficulty and attrition is supported by many of the studies on retention[2] which identify poor grades, especially those earned early in a student's career, as stable predictors of attrition. The Early Warning System, by contacting students already in some academic trouble and by offering them academic advising and support services, attempts to prevent

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[1] See Samaniego, Francisco J. and Rickard, Scott T. "Covariance Analysis in the Evaluation of an Enrichment Program," Summer 1977, and Suhr, Jeanne "Study of the 1978 Summer STEP," October 1980, available from the Office of Student Affairs Research and Information.

[2] Pantages, Timothy J., and Creedon, Carol F. "Studies of College Attrition: 1950-1975." Review of Educational Research, 1978, XLVIII, 49-101.

the compounding of these problems and to reach special action EOP students who appear to be potential dropouts.

Program Description

The Early Warning System was implemented in 1981-82 as part of the ISP pilot program and has been continued to date essentially unchanged. It operates twice during the student's first year at UC Davis and follows these procedures:

1) seventh week study lists of all EOP students are forwarded from the Registrar's Office to the Learning Skills Center (LSC);
2) the LSC staff reviews the study lists and makes a list of the courses and sections that contain EOP special action students;
3) the LSC staff then sends this master course list back to the Registrar's Office;
4) at the end of the quarter, the Registrar sends grades for the courses and sections on the list to the LSC;
5) LSC staff records the grades on the original seventh week study lists (which now represent a running transcript of each student's work);
6) LSC staff examines the study lists and identifies all students with one or more unsatisfactory grades;
7) LSC staff sends a letter to each student with an unsatisfactory grade acknowledging the student's academic difficulty and inviting the student to participate in ISP;
8) during the first two to three weeks of the next quarter, LSC staff calls and invites the same students to come in to the Center for a personal interview.

Several attempts are made to contact each student; during the phone calls students are strongly encouraged to come in for an interview. Students who fail to appear for an interview are called again to schedule another appointment. However, the Early Warning System has no follow-up procedures either to determine whether students who come in for an interview actually follow the academic advice given or to assess their subsequent academic progress after the start of spring quarter.

Target Population

The majority of special action EOP students who entered in Fall 1981 and Fall 1982 were identified by the Early Warning System due to poor grades. Approximately 68% of Fall 1981 and 73% of Fall 1982 special action EOP students earned at least one unsatisfactory grade during their first two quarters at UC Davis. As Table 1 indicates, these EWS students are predominately affirmative action students who enter UC Davis directly from high school and who attend the summer STEP. Over one in five is a special action committee admit; over two-thirds enter the College of Letters & Science.

TABLE 1

PROFILE OF THE EARLY WARNING SYSTEM GROUPS
(in percent of students in each group)

	Fall 1981 Entrants (n=117)	Fall 1982 Entrants (n=138)
Gender		
Male	45.3%	47.8%
Female	54.7	52.2
Ethnicity		
Black/Afro-American	43.1	40.1
Chicano/Mexican-American	13.8	14.5
Latino/Spanish-American	2.6	7.3
Native American	3.4	2.9
Pilipino	6.9	10.2
SAA Subtotal	69.8	75.0
Asian	18.1	13.9
White	10.3	9.5
Other	1.7	1.5
STEP		
Attended	76.9	65.9
Waived	23.1	34.1
Entry Level		
High School	68.4	76.1
Advanced Standing[1]	31.6	23.9
Special Action Status		
Formula	64.7	77.9
Committee	35.3	22.1
Admit College		
L & S	70.1	66.7
A & ES	17.9	21.0
Engineering	12.0	12.3

Note: Students must have completed at least one quarter to be included in these data.

[1]Entered with 12.0 or more units of college credit.

As discussed in the Report of the UC Davis Task Force on Retention and Transfer, attrition in academic difficulty is related to entering academic qualifications: the lower the high school GPA or SAT score, the more likely it is that a student will leave in academic difficulty. The GPA and SAT scores on Table 2 highlight the extent to which Early Warning System students are at risk. While their qualifications are only slightly lower than those of all special action students, these qualifications are considerably lower than those of the average UC Davis freshman. For example, in Fall 1982 the average GPA of UC Davis freshmen entering directly from high school was 3.67, as opposed to 2.73 for the EWS students, and their average total SAT score was over 250 points higher than that of the EWS group.

TABLE 2

ENTERING ACADEMIC CHARACTERISTICS OF THE EARLY WARNING SYSTEM AND COMPARISON HIGH SCHOOL ADMITS

	Fall 1981 Entrants			Fall 1982 Entrants		
	EWS Group	Special Action Total	Regular Total	EWS Group	Special Action Total	Regular Total
Mean Verbal SAT	350	382	493	352	381	493
Mean Math SAT	403	439	557	442	450	560
Admit GPA	2.69	2.80	3.83	2.73	2.90	3.67

PROGRAM IMPLEMENTATION AND IMPACT

The current study examines the following questions:

1) Was the target population identified and contacted?
2) What specific services/advice were offered to contacted students?
3) To what extent did students use the services and follow the academic advice given?
4) What were the short-term academic outcomes for students who did and did not use the service?
5) Was retention of students who used the service higher than expected for this high risk population?

To examine these questions, the Office of Student Affairs Research and Information obtained records on the operation of the Early Warning System from the Learning Skills Center. Complete quarter-by-quarter term detail data were obtained from the Student Record System in order to develop a picture of the impact of the EWS on service recipients. Compliance with LSC-documented advice to add or drop courses or to sign up for tutoring was checked by examination of LSC tutoring records and student transcripts.

The time period covered by this report, 1981-82 and 1982-83, includes four distinct periods of Early Warning System activity. The grades of each entering class were assessed between the first and second quarter (fall/winter) and between the second and third quarter (winter/spring) of their first year. In the tables below, data are analyzed separately for each entering class, for each observation period.

Program Implementation

The first objective of the EWS is to identify new special action EOP students who received at least one unsatisfactory grade during fall or winter quarter. As Table 3 below indicates, the system has been successful in this regard. In each of the four periods under study, LSC staff identified and made efforts to contact over 90% of the special action EOP students in academic trouble. A review of student transcripts revealed only a small number of students with one or more unsatisfactory grades who were not identified by the Learning Skills Center.

TABLE 3

EARLY WARNING SYSTEM SERVICE SUMMARY
(in percent of students with unsatisfactory grades)

	Fall 1981 Entrants		Fall 1982 Entrants	
	Fall/ Winter (n=73)	Winter/ Spring (n=71)	Fall/ Winter (n=99)	Winter/ Spring (n=83)
Identified by the EWS	94.5	93.0	99.0	95.2
Interviewed[1]	82.6	42.4	55.7	44.3
Refused interview	NA	NA	18.6	27.8
Total contacted	NA	NA	74.3	72.1
Unable to contact	NA	NA	25.8	27.8

NA=breakdown is not available.

[1]Data collection procedures were being refined through much of 1981-82; the entries on the following tables most likely reflect the minimum of service offered during this year.

In 1982-83 about half of the identified EWS students were contacted and agreed to come in for an interview, another quarter were contacted but declined an interview, and about one quarter could not be contacted (no phone, no answer, etc.). Stated another way, the LSC was able to contact over 70% of the EOP special action students with unsatisfactory grades, of

whom 60-70% came in for an interview. During the 1981-82 and 1982-83 academic years the LSC interviewed 42 to 44% of all EOP special action students as part of the EWS advising process.

Students who declined an interview or who could not be reached may have received substitute advising and support services, either from other units on campus or from the LSC later in the quarter. A review of the LSC intake cards for 1982-83 revealed that almost all special action EOP students either attended summer STEP or received another form of assistance from the LSC at some point during their first year at UC Davis.

The second objective of the Early Warning System is to provide advice and support services designed specifically to address each student's academic problem. Although not part of this report, the EWS interviews also included discussions of personal as well as academic matters in order to address problems that affect students' social integration into the University community. Based on interview records kept by the LSC for both years, about 400 specific academic recommendations were made to 151 students. Each recommendation was tracked to see if it was followed and, where possible, to assess the academic outcome of that unit of advice.

Table 4 summarizes the results of 175 interviews held during the four time periods under study. Types of advice given during the interviews included recommendations to add tutoring, drop and/or add courses, and to join ISP. Despite variations among time periods, the overall trend appears to be that most units of advice provided during the interviews were followed and that, where measurable, most of these units had successful outcomes.

EWS students who follow tutoring recommendations are twice as likely to be successful in their respective courses as are students who do not follow the program's tutoring recommendations. The percent of EWS students receiving a grade of C- or above for a tutored course in 1982-83 (60.3%) is almost identical to that of all students receiving one-to-one tutoring at the LSC in that year (61.2%).[3] This outcome is remarkable for the fact that, unlike the EWS students, not all of the students receiving one-to-one tutoring had been in some academic difficulty the prior quarter.

The most frequent advice regarding schedule revisions was to add specific courses; this advice was likely to be followed, and 50 to 60% of students following this advice received a grade of C- or above in the additional course(s). Dropping planned courses was also advised, although not as often as adding courses. Students were somewhat more likely to follow advice to drop specific courses. In 1982-83 over 70% of students followed a recommendation to drop a course, but among those who chose not to drop, only 40% were able to get a grade of C- or above in that course. Thus students who followed advice to add a course were more likely to be successful in their course than were students who failed to drop a course the LSC recommended dropping. This result is consistent with the attempt to advise students into courses, or proper course sequences, in which they can succeed and out of courses for which they are unprepared.

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[3]Learning Skills Center Annual Report, 1982-83.

TABLE 4

EARLY WARNING SYSTEM INTERVIEW SUMMARY
(in percent of units of advice)*

	Fall 1981 Entrants			Fall 1982 Entrants		
	Fall/ Winter	Winter/ Spring	Total	Fall/ Winter	Winter/ Spring	Total
Tutoring recommended	(n=10)	(n=24)	(n=34)	(n=68)	(n=66)	(n=134)
Followed advice	60.0%	37.5%	44.1%	61.8%	47.0%	54.5%
Successful in course[1]	50.0[a]	55.6	53.3	71.4	45.2	60.3
Did not follow advice	40.0[a]	62.5	55.9	38.2	53.0	45.5
Successful in course	0.0	26.7[a]	21.1	26.9	34.3	31.1
ISP recommended	(n=35)	(n=12)	(n=47)	(n=23)	(n=9)	(n=32)
Participated formally	48.6	50.0	48.9	43.5	33.3[a]	40.6
Completed contract	94.1	100.0	95.7	60.0	100.0[a]	69.2
Participated informally	51.4	50.0	51.1	56.5	66.7	59.4
Schedule revision advised	(n=35)	(n=8)	(n=43)	(n=72)	(n=37)	(n=109)
Add course(s)	80.0	100.0	83.7	45.8	62.2	51.4
Followed advice	75.0	62.5	72.2	66.7	43.5	57.1
Successful in course	47.6	80.0[a]	53.8	59.1	60.0	59.4
Did not follow advice	25.0	37.5[a]	27.8	33.3	56.5	42.9
Drop course(s)	20.0	0.0	16.3	54.2	37.8	48.6
Followed advice	85.7	----	85.7	71.8	71.4	71.7
Did not follow advice	14.3[a]	----	14.3[a]	28.2	28.6[a]	28.3
Successful in course	100.0[a]	----	100.0[a]	27.3[a]	75.0[a]	40.0

*Students appear more than once in this table if they received more than one unit of advice.

[1]Received a grade of C- or above.
[a]Represents fewer than five observations.

The Early Warning System is also successful in meeting its third objective of directing students with basic math and language skills deficiencies into the Individualized Study Program. All of the students for whom ISP was recommended during the interview participated in ISP workshops and development activities during the following quarters.

Program Impact

While the Early Warning System succeeds in meeting the three discrete and measurable process objectives identified above, translation of this success into improvement in overall academic performance and retention of EWS participants is more difficult to assess. As Table 5 below indicates, most students are in serious academic difficulty by the time they come in for their interview. On average, their GPAs for the prior quarter are less than 2.0; over 40% of their coursework received unsatisfactory grades.

TABLE 5
ACADEMIC PERFORMANCE SUMMARY OF INTERVIEWED STUDENTS

		Quarter Prior to Interview	Quarter After Interview	Third Quarter Cumulative[1]
UC Davis GPA				
Fall/Winter	1981-82	1.97	2.12	2.16
Fall/Winter	1982-83	1.99	2.16	2.18
Winter/Spring	1981-82	1.44	2.07	2.02
Winter/Spring	1982-83	1.94	1.99	2.05
Percent of workload below C-				
Fall/Winter	1981-82	44.1%	22.8%	----
Fall/Winter	1982-83	40.5	25.8	----
Winter/Spring	1981-82	44.5	29.2	----
Winter/Spring	1982-83	46.8	25.5	----

[1]Represents three completed quarters.

After each of the four sets of interviews, students who received academic advice showed some improvement, in most cases earning GPAs >2.0 and reducing their unsatisfactory workload units by 15 to 20%. For the most part, students interviewed between fall and winter quarter were able to maintain this improvement through the end of the academic year. Because typically students received a variety of academic advice but often chose to

follow some pieces and ignore others[4], it is not possible to separate the students into two distinct groups to determine whether students who followed the advice overall showed more improvement than students who did not.

In 1982-83 (the year for which EWS records are most complete), contacted students who chose to come in for an interview were representative of the overall EWS population in terms of gender, ethnicity, and entrance level. Not surprisingly, given students' positive evaluations of summer STEP, those students who attended the summer portion of STEP were more likely to accept academic year assistance from the LSC. For example, after the 1982 Fall Quarter, 80% of the summer STEP students with unsatisfactory grades came in for an interview as opposed to 65% of the group that did not attend summer STEP. Also, during both the Fall/Winter and Winter/Spring time periods, contacted students with GPAs $\geq$ 2.0 were somewhat more likely to come in for an interview (70%) than were students in more serious academic difficulty (59%).

Given the extent of their academic difficulty, it is encouraging to note that the retention rates of EWS interviewed students are equal to those of several different student groups. Comparable fourth quarter retention rates[5] for Fall 1981 students entering directly from high school are: EWS interviewed students (79%), all special action EOP students (79%), all special action students (78%), and all regularly admitted students (84%).

While it appears that EWS interviewed students show some improvement in academic performance and remain at the University in numbers equal to their cohorts, it is not clear whether these results are attributable to intervention by the Early Warning System.

Tables 6A and 6B below track students' academic performance through the first year at UC Davis according to EWS intervention status (e.g., interviewed, not able to contact, etc.). As the data on these tables indicate, regardless of whether or not they received academic advising and support services through the EWS, all of the groups earned slightly higher GPAs the following quarter. Students who were not interviewed showed almost as much improvement in their overall GPA's as students who were interviewed.

However, the value of comparing groups of students based solely on their EWS intervention status is questionable. For, unlike the summer STEP in which students either participate in a standard set of activities or do not, the EWS is only one of a variety of simultaneous support and advising services offered to special action EOP students during the academic year.[6] This confounding of service factors makes it impossible to interpret the data on these tables in any straightforward way.

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[4]For both years, about 80% of interviewed students followed at least one unit of the academic advice they received.

[5]Fall 1981, Winter 1982, Spring 1982, Fall 1982

[6]These services include those offered by faculty and College advisors, the Counseling Center, EOP/SAA Information Office, First Resort and Academic Peer Advising.

TABLE 6A

EARLY WARNING SYSTEM INTERVENTION SUMMARY
Fall 1981 Entrants

	Quarter Prior to Interview	Intervention	Quarter After Interview	Third Quarter Cumulative[1]
UC Davis GPA				
Fall/Winter	1.97	Interviewed	2.12	2.16
	2.12	Not able to contact/Refused	1.23	2.03
Winter/Spring	1.44	Interviewed	2.07	2.02
	1.73	Not able to contact/Refused	2.07	2.13
Percent of workload below C-				
Fall/Winter	44.1%	Interviewed	22.8%	----
	35.9	Not able to contact/Refused	62.2	----
Winter/Spring	44.5	Interviewed	29.2	----
	48.9	Not able to contact/Refused	29.6	----

[1]Students must have completed three quarters.

TABLE 6B

EARLY WARNING SYSTEM INTERVENTION SUMMARY
Fall 1982 Entrants

	Quarter Prior to Interview	Intervention	Quarter After Interview	Third Quarter Cumulative[1]
UC Davis GPA				
Fall/Winter	1.99	Interviewed	2.16	2.18
	1.68	Refused interview	1.94	1.94
	1.72	Not able to contact	1.97	2.09
Winter/Spring	1.94	Interviewed	1.99	2.05
	1.80	Refused interview	2.32	2.10
	2.04	Not able to contact	2.29	2.26
Percent of workload below C-				
Fall/Winter	40.5%	Interviewed	25.8%	----
	47.2	Refused interview	34.5	----
	44.7	Not able to contact	34.5	----
Winter/Spring	46.8	Interviewed	25.2	----
	44.2	Refused interview	18.3	----
	44.4	Not able to contact	9.5	----

[1]Students must have completed three quarters.

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The large majority of students in the non-interviewed groups received some form of LSC assistance during the year and, though not a part of the EWS advising process, they may well be recipients of other advising services on campus. The only comparison possible is between those students who were interviewed through the Early Warning System and those students whose service status is unknown. Consequently, it is unclear whether the data on these tables indicate that students who were interviewed would have improved just as much without EWS advising and support services or whether they would have improved just as much by selecting some alternate set of services.

Measuring the impact of the EWS on retention rates is hampered by the same ambiguity. Overall for both years, EWS students who received EWS advising services had higher retention rates than EWS students who did not. In 1981-82 the fourth quarter retention rate for EWS interviewed high school admits was approximately 79%. For students in similar academic trouble who were not interviewed, the comparable retention rate was only 64%. In 1982-83, 70% of interviewed students enrolled for a fourth consecutive quarter as opposed to 51% of the non-interviewed students.

TABLE 7

FOURTH QUARTER ENROLLMENT OF THE EARLY WARNING SYSTEM POPULATION
(In percent of high school admits)

	Fall 1981 Entrants	Fall 1982 Entrants
Interviewed	78.6%	70.2%
Not Interviewed	64.0	51.3

A more detailed breakdown of retention data for 1982-83 indicates that, within the non-interviewed group, students who refused the offer of assistance had a considerably higher retention rate than students who could not be reached. Approximately 68% of the Fall 1982 EOP special action high school admits who declined EWS services returned for a fourth quarter as compared with only 35% of the students who could not be reached.

A primary reason why some students could not be reached is that they make their withdrawal decision early in the academic year, prior to the start up of the EWS advising process. Of the 22 high school admits who earned unsatisfactory grades fall quarter and who could not be reached, 11 did not enroll for a second year; five of the eleven dropped out immediately after completing fall quarter. Sixteen non-contacted high school admits earned unsatisfactory grades during winter quarter; nine of these students did not enroll for a second year, seven of them left after completing winter quarter. In total, 60% of the students who could not be contacted by the LSC left before the EWS advising process began for the next quarter. Most of the attrition of students in the other two groups occurred at the end of the first year.

Regardless of their EWS intervention status, attrition for EWS students is not likely to be voluntary. Approximately three-quarters of all Fall 1981 and all Fall 1982 special action EOP students who received at least one unsatisfactory grade during fall or winter quarter, and who withdrew from the University, did so in academic difficulty.[7]

CONCLUSION

The Early Warning System is successful in identifying its target population and delivering academic advising and support services to special action EOP students who, on the basis of their fall and winter quarter academic performance, appear to need these services the most. The EWS provides an efficient means of tracking and monitoring the extent of academic difficulty incurred by these students at two critical points in their first year. Not relying entirely on the motivation of the individual student, LSC staff contacts students with unsatisfactory grades and strongly encourages them to come in for an interview. In general, where the units of academic advice provided are followed, successful outcomes result.

An analysis of whether this tracking and advising process improves academic performance and retention of service recipients leads to more equivocal results. Part of the difficulty with such an analysis is the use of global measures of academic performance, such as GPAs and fourth quarter retention rates; part of the difficulty is with the somewhat arbitrary assignment of students to comparison groups defined more in nominal than in actual terms.

GPAs and retention rates as measures of academic performance are responsive to a number of variables, of which advising and support services are only two. The impact of even a highly successful tracking and advising system may well be insignificant compared with the variation caused by these other factors. At UC Davis, advising and support services for special action EOP students reside in a number of Student Affairs units, in the student's academic department, and in the offices of undergraduate Deans. For the most part, students may move into and out of these services at will, choosing a level of service based on individual need and/or motivation. Students who choose to accept help from the Early Warning System may also elect to receive advising services from other units on campus. Students who choose not to accept EWS services may do the same. Without a clear understanding of the service choices made by each student, assignment to groups based solely on EWS intervention status will provide somewhat ambiguous results. Taking into consideration these limitations, it does appear that special action EOP students who participate in the EWS advising process have retention rates 15 to 20% higher than special action EOP students who do not participate.

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[7] On probation or subject to Dean's dismissal as of the last completed quarter.